Tuan Anh Nguyen

GitHub: github.com/h114mx001 LinkedIn: Nguyen Tuan Anh

Personal Website: https://h114mx001.netlify.app

BSc. in Computer Science; GPA: 3.65

EDUCATION

VinUniversity

Hanoi, Vietnam

September 2021 - (Expected) June 2025

Work Experience

Information Security Lab, VinUniversity

On-site

Mar 2023 - Nov 2023

Email: 21anh.nt@vinuni.edu.vn

Mobile: +84-869-286-227

Undergraduate Research Assistant

- Achieved a \$1000 research grant from VinUni Undergraduate Research grant for a research project on Implementation
 of Lightweight Key Exchange on IoT devices, under supervision of Professor Wong Kok-seng.
 Conducted experiments on privacy preserving protectly for including but not limited to Endowsted Learning for
- Conducted experiments on privacy-preserving protocols for including but not limited to Federated Learning & multiparty computation systems, which resulted in 01 published research papers.

College of Engineering & Computer Science, VinUniversity

On-site

Undergraduate Research Assistant

Mar 2023 - Nov 2023

- Conducted two independent study courses on Modern Cryptography under Professor Wray Buntine's supervision, with foundational topics of Cryptology.
- \circ Created "CryptoBook for n00b1es" a comprehensive Cryptography notes for beginners how to implement and attack cryptography algorithms.
- Developed a Twitter Crawler with hashtag/keyword-based tweet crawling & user profile visualization features to analyze Twitter discussions about ChatGPT and other GPT models.
- Successfully crawled more than one million tweets and more than ten thousand profiles within 01 month.

Viettel Cyber Security

Hybrid

Vulnerability Research Intern

Aug 2022 - Mar 2023

- Achieved distinction among 300+ candidates to secure a position as one of the top 25 interns in the batch, engaging in an intensive 6-month training program focused on mastering Reverse Engineering, Binary Exploitation, and other Exploit Development skills on x86-64 platforms.
- Achieved the second highest rank out of 25 interns during CTF contests of VCS Academy Team.

CyberKid Vietnam

Remote

* Cybersecurity Instructor

Nov 2022 - Feb 2023

- Collaborated with teams to create the syllabus, materials, and labs for a Programming and Cryptography course designed to educate children about Cyber Security.
- \circ Became the speaker in 03 seminars for young students about basic Cryptography & Exploit Development, which provided education on cybersecurity for 216 high school students.

Project

VinUni Hacking Club

Co-founder, President

 $Mar\ 2022$ - Present

- o Organizers, DevSecOps Engineer & challenge authors of VinUni CTF the annual capture-the-flag competition at VinUniversity. Attracted in total more than 150 students from VinUniversity & 07 other universities' computer security clubs.
- Created an extensive training program which covers from foundational knowledge to advanced topics in cybersecurity for 13 VinUni Hacking Club's members.
- Contributed to open-source CTFd platform by improving CTFd-Docker-Challenge plugin for managing isolated hacking platform via Docker images via secure TLS connection to Docker daemon, and additional integration Dynamic Value.
- o Contributed write-ups & challenges from VinUni CTF and other CTFs to VinUni Hacking Club GitHub repository

VinUniversity Medical Dictionary - MedDict

Backend Developer & DevOps Engineer

Sept 2023 - Present

- Adopted & Developing the backend API for VinUniversity Medical Dictionary MedDict a project to support VinUniversity's College of Health Sciences students in learning medical terminology.
- Developed a search engine API & Google Chrome plugin for searching medical terms efficiently with open-source illustration & text-to-speech of the terms, and a admin dashboard for managing the dictionary
- o Frequently used by more than 200 medical students in College of Health Sciences, VinUniversity.

my_rust_os

Developer

July 2023 - October 2023

- $\circ \ \ \text{An educational \& hobby Operating System, written in Rust for the course "Course-related Project I" at VinUniversity.}$
- Provided a simple file system, terminal-user-interface and some basic utilities by Rust programming language, with support of QEMU Emulator.

ACHIEVEMENTS

Top 05 Vietnam Student Representative - Global Cybersecurity Camp 2024

Issued by VNSecurity Foundation

2024

• Selected as one of the top 05 Vietnam student representatives to participate in the Global Cybersecurity Camp 2024, an international bootcamp & hackathon about cybersecurity.

Finalists, ASEAN Student Contest on Information Security 2023

Issued by Vietnam Information Security Association

2023

• Advances to the Final Round of ASEAN Student Contest on Information Security 2023. Ranked in top 25 over more than 100 teams in the competition.

Top 0.1% Best CTF Player on CryptoHack

Issued by CryptoHack.org

2023

 \circ Ranked in the top 94/100 on CryptoHack, demonstrating familiarity with cryptography algorithms and outstanding problem-solving skills.

Dean's List and VinUni Merit-based Scholarship

Issued by VinUniversity

2020 - 2022

• For outstanding academic performance and contribution, three consecutive Dean's List awards were received, along with a merit-based scholarship for undergraduate studies covering 90% of tuition fees.

Publication

Towards Efficient Communication and Secure Federated Recommendation System via Low-rank Training

• Ngoc-Hieu Nguyen, **Tuan-Anh Nguyen**, Tuan Minh Nguyen, Vu Tien Hoang, Dung D. Le, Kok-seng Wong Accepted for ACM The Web Conference 2024